Phyllis Ellin and Dan Riss

Notes from the Field

Industrial Preservation in Great Britain

The following are reports submitted by NPS historian Phyllis Ellin and conservator Dan Riss about their involvement with industrial preservation in Great Britain. First, Phyllis Ellin relates her experience as part of Countryside Exchange team, and next Dan Riss discusses a paper he presented at a conference in Wales.

In October 1996, I was part of a seven-member Countryside Exchange team that met at the Ironbridge Gorge in Shropshire, England. Designated in 1986, Ironbridge Gorge was the United Kingdom's first World Heritage Site and one of the few industrial sites recognized by UNESCO for its role as the birthplace of the Industrial Revolution. The site includes the village of Coalbrookdale, where Abraham Darby developed his process to manufacture iron on a large scale. Perhaps more famous is the bridge spanning the Severn River, the world's first iron bridge constructed in 1779. The Gorge is also dotted with several small settlements from the early industrial era, including Coalport, the home of Coalport china. The region's diverse mineral and timber resources, combined with transportation on the Severn, created an ideal incubator for early industrial development.

The Countryside Exchange originated in a Memorandum of Understanding between the National Park Service and the United Kingdom's Countryside Commission signed in 1986. Exchanges have taken place in both countries and in Canada. Local communities are selected voluntarily as case studies in various planning and resource management problems, and an international team with skills and interests matched to each case study is assembled. For Ironbridge Gorge, the Americans on the Exchange Team included myself; JoAnn Dolan, Assistant Director of the Forest Service's Mono Basin Scenic Area Visitor Center; and Larry Belli, Deputy Superintendent of Everglades National Park. The United Kingdom members were Tony Gould, a planning officer for Surrey County Council; Gordon Hewston, an ecologist with English Nature; John Jewitt, Senior Rural Officer with the Cleveland Council for Voluntary Services in Middlesborough; and Kate Sussams, a landscape archeologist with the Suffolk County Council.

Ironbridge Gorge was selected as a case study because it was in the process of developing a management plan for the area, as required for all World Heritage Sites. This process is a complex one, requiring participation and cooperation of many local governments, community groups, and private property owners. Under the guidance of the local Exchange sponsors, John Elvey of the Wrekin Council regional government and Jim Waterson of the Severn Gorge Countryside Trust, the Exchange Team spent a week examining the resources of the Gorge and meeting with a variety of the players and interested parties in the area. Issues considered included sustainable tourism and visitor management, interpretation of both cultural and natural resources and their interplay, forging a working partnership among agencies developing the management plan, and public participation in the process.

The Team's recommendations at the end of the week, presented at a public meeting and in a written report, attempted to address all those issues in a holistic way. The wide variety of resources scattered throughout the area prompted a recommendation that a more focused interpretive strategy be developed to emphasize the central story of world significance and to show how the varied sites in the area contributed to it. Such a story must include the critical role of the area's natural resources in the industrial story. We recommended that the inter-agency group formed to develop the management plan also try to integrate the land management policies across the World Heritage Site. Finally, we stressed the critical importance of effective communication with the public and acknowledgment of the Gorge's community history as part of the "cultural landscape."

In April 1997, curators, conservators, and historians met in Cardiff, Wales, at a conference titled "Industrial Collections: Care and Conservation." The conference, which was attended by representatives from the United Kingdom, Canada, France, Germany, and the United States, discussed problems in preserving, restoring, and displaying large objects such as mining equipment, locomotives, and farm

machinery. Unlike most museum objects, much of this equipment is maintained in working order to enhance interpretation. A conflict can arise, however, between historians and conservators, on the one hand, and mechanics and restorers on the other. One side views objects as technological documents, while the other sees them as of little use unless they are working and moving.

In my talk, I discussed the issue of documentation as an area of conflict between restorers and conservators. Conservators want to document everything they can, and if possible leave everything "original" alone; restorers are anxious to get the machine working—even if parts need to be modified—and get documentation after the fact. I suggested that the two could move to the center if restorers would learn to document more, and if conservators would occasionally relax enough to allow changes to original surfaces and parts—if the changes were thoroughly documented.

The conference papers will be available as a publication of the United Kingdom Institute of Conservation (6 Whitehorse Mews, Westminster Bridge Road, London SE1 7QD). Another useful recent publication is *Larger & Working Objects, A Guide for Their Preservation and Care,* a publication of the Museums and Galleries Commission (MGC Publications, 16 Queen Annes Gate, London SW1H 9AA, price 11.25 pounds, and postage).

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Bob Higgins

Preserving the History of Mining Technology in the NPS

The National Park Service preserves many sites and artifacts associated with the history of mining. These cultural resources reveal how mining shaped American development. The metals and minerals extracted from mines effect many aspects of our lives, whether we use them in the home (glass, nails, pipes), in industry (tools, machines), in communications (televisions, radio, telephones), or in transportation (automobiles, airplanes).

There are many ways to tell the mining story. To simplify interpretation, we can view mining technology in three parts or phases: extraction (or removal of material from the ground), processing (milling, refining), and transportation. NPS units contain evidence of changing technologies in all three phases.

Alibates Flint Quarry National Memorial in the Texas Panhandle is an excellent representation of mining techniques practiced by native Americans before European arrival. Southwestern parks, where early Spanish settlers extracted gold and silver, have the remains of mine openings and arastas for grinding. NPS units also contain many western mines from the late-19th and early-20th centuries, a period of rapid technological change. The copper mines of the Kennicott Mining Company in Wrangell-St. Elias National Park and Preserve, Alaska, and Calumet in the Upper Michigan Peninsula have wonderfully preserved machinery and structures from this period. Glacier National Park has a massive cast iron jaw-crusher and steam engine at the Cracker Mine.

The coal mines and structures (e.g., buildings, electric train cars, coke ovens, conveyor systems, etc.) in New River Gorge National River, West Virginia, and Big South Fork National River, Tennessee, are reminders of the dominance of coal in the American economy. Many diggings and structures dotting Colorado plateau parks and the six-story steel headframe on the rim of the Grand Canyon are silent testimony to the role of uranium mining during the Cold War.

The saltpeter (nitrate) works at Mammoth Cave in Kentucky supplied the chief ingredient of gunpowder until the War of 1812. Gold was mined within the C&O Canal near Washington, DC, from the colonial period to the early-20th century. Allegheny Portage Railroad NHS in Pennsylvania transported barges over the mountains with steam hoists and mined coal to fuel the boilers. The iron furnace at Hopewell Furnace NHS near Philadelphia operated from 1771 to 1883. The New Jersey side of Delaware Water Gap NRA is home to the Pahaquarry Copper Mine.

Mining technology within the NPS spans the continent in both time and place. Some mining features are the main reason for a park's creation, and others are but a side story of the area's history. Among the tools and equipment in park collections are hand and mechanical rock drills, conveyor belts, and 300-ton capacity trucks. Mining continues to supply the raw material for our economy, and its technology awaits discovery by park visitors.

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